

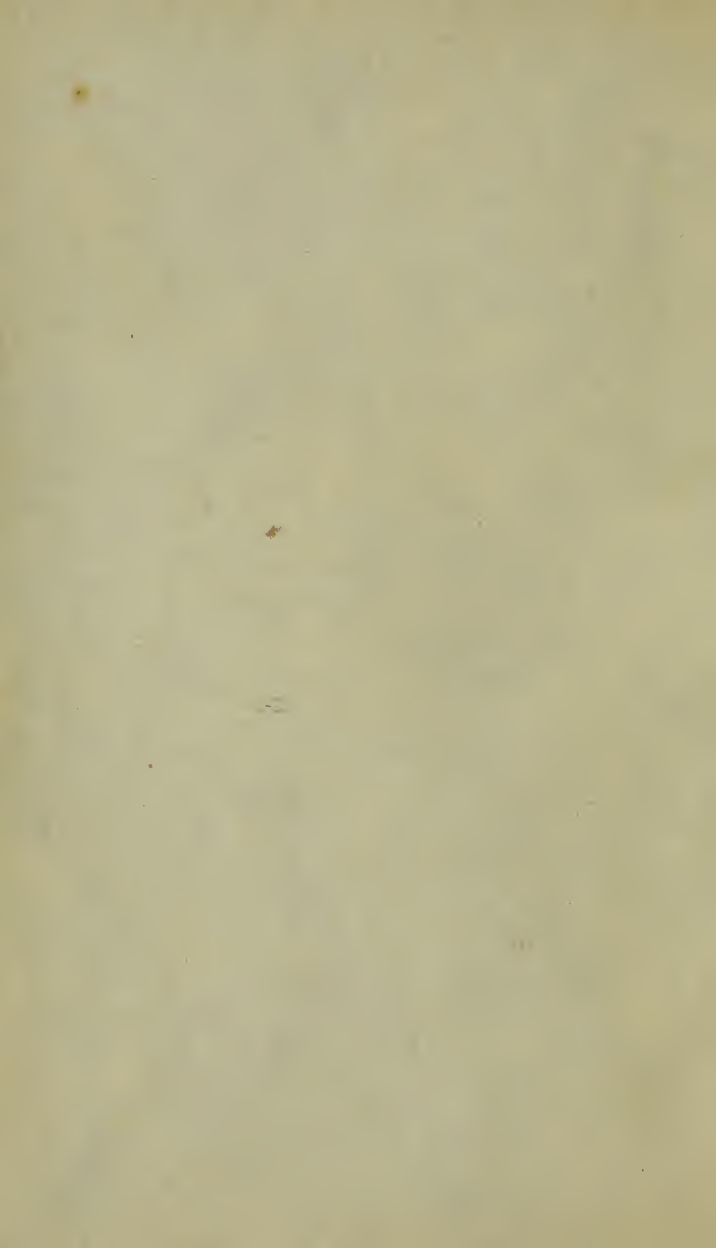
FREE-HAND DRAWING.

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# FREE-HAND DRAWING:

A GUIDE TO ORNAMENTAL, FIGURE,  
AND LANDSCAPE DRAWING.

BY AN ART STUDENT,

AUTHOR OF "ORNAMENTAL AND FIGURE DRAWING."

*PROFUSELY ILLUSTRATED.*

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# FREE-HAND DRAWING.



## CHAPTER I.

### SECTION I.—MATERIALS EMPLOYED IN DRAWING, AND HOW TO USE THEM.

PREVIOUS to the student's beginning his work, it will be well for him to understand what sort of tools he will have to use, and how to use them. There are two or three things he will have to provide himself with, and two or three things he will have to do with them, before he can commence direct operations.

In the first place, he must get a drawing-board. If he be of an ingenious turn of mind he will make this himself. It may be made about twenty-four inches by twenty, and should have its edges accurately squared. There should likewise be fixed upon the lesser edges two wooden clamps about a couple of inches wide,



the grain of which must run at right angles with the grain of the body of the board (*see fig. 1*). This is to prevent its becoming ill-shaped, and of the form



Fig. 1.

of a meniscus. We once had a drawing, upon which weeks of labour had been spent, utterly spoiled by neglecting this simple precaution. We stretched a sheet of imperial upon a board with-

out clamps. The paper drew in the wood, and became consequently very uneven,—all hills and hollows, in fact,—and the rubbing of the sheet against other boards in the study-rack smeared the chalk in the raised places past all redemption.

He will require, likewise, a sheet of paper. For first practice it is not of much importance what sort of paper he uses. Cartridge at twopence, or imperial at threepence, the sheet, will do very well at the commencement.

A black-lead pencil (HB) of Rowney's make, which will cost twopence, a penny piece of india-rubber, and

half-a-dozen drawing-pins, buyable for threepence, will complete the student's outfit.

These materials procured, the paper (if he do not prefer to pin it down) must be stretched upon the board. This is done by wetting it upon the side which is intended to be placed next to the wood, then gumming the edges, and pressing them down cleanly and carefully with a handkerchief. When the paper becomes dry it will be found tightly stretched, if the operation has been judiciously gone through.

The student must next sharpen his pencil. And this, despite its apparent simplicity, is difficult to do rightly. We have seen youths cut and slash their black-leads as vigorously as they would a hazel stick, in the vain endeavour to get a good point. Nothing but care and patience will enable the student to cut his pencil well, and if he get in a rage at its repeated breakings, the odds are very heavy against his succeeding to make a point at all. The right method of sharpening a pencil is this :—Take it in the left hand, with that end towards you which is furthest from the letters that show its quality, and hold it between the thumb and fore-finger tightly. With a knife, whose edge should be of the keenest, cut away the wood gradually, starting about three-quarters of an inch

from the end. When the lead becomes exposed, lay the point upon your thumb, and, holding the body of the pencil between the second and third fingers of the left hand, use your knife delicately until the required degree of fineness is obtained. Never attempt to cut your point without having it well supported on some part of your hand. The best position is the one just mentioned.

The reader is now in a position to commence practice, and the first thing he must acquire is the power of drawing a line accurately.

## CHAPTER II.

### SECTION II.—ON LINES, AND HOW TO DRAW THEM.

THE ability to draw a line of a given length and thickness, with certainty and correctness, is the foundation of a draughtsman's power, and the best proof of a draughtsman's excellence. Thus it is, that wherever this kind of ability is eminent, great notice is taken of the fact by men whose opinions on matters of art have become laws for the guidance of artists. Mr Ruskin, for example, is enthusiastic concerning Prout's "straight line;" and the majority of writers on art, since the time of Giotto, have not failed to quote the Italian proverb, "As round as Giotto's O." It is a misfortune that so little attention should be paid in our schools of art to the cultivation of "line power;" this neglect arising partly perhaps from the practice of chalk-shading, by stippling with the point in preference to the nobler and healthier method of pure hatching.

The first acquirement of the student is the power to draw a straight line, that being the simplest kind of



Fig. 2.

line. The method of drawing one is as follows (*see fig. 2*):—First, scrutinise closely the example given. It is composed of five perpendicular lines of equal length and thickness, and with an equal distance be-

tween them. They are all strictly parallel and strictly equidistant. The student should remember that saying of Mulready's to Ruskin, "Know what you have to do;" and we counsel him to get plainly fixed in his mind the "idea" of the figure before he attempts to copy it. Clearness of perception is one-half the work.

We suppose, then, that the reader has this clear notion of the task before him, and is ready to begin an imitation of the figure. Let him now carefully mark out upon his sheet of paper four points which will

answer to the four corners of the example. This he must do in the following way:—A point must be fixed upon to represent the upper extremity of the line *a*. The length of *a* is to be next measured by the eye (of course, all such outside or unfair helps as rules or compasses are to be in everywise avoided). This will need much close calculation in his first practice. When this is done to his satisfaction, he must calculate and determine, in like manner, the distance from *a* to *e*, and from *f* to *k*. The student needs now to settle the minor distances from *a* to *b*, *b* to *c*, *f* to *g*, etc., which will require as nice cautiousness as he is capable of. These should be repeatedly examined before he attempts to connect them by the lines. If after careful scrutiny he can perceive no errors, he must proceed to draw the line *a*. This is to be done by first placing the hand in a position which commands the whole length from *a* to *f*, or, in other words, by giving the fingers which hold the pencil such scope of motion as that *a f* may be drawn without shifting the fingers that form the point of rest. For the line must not be produced by the rapid dash of unfettered fingers, whose power is but semblance and whose freedom is mere license, but by the deliberate and constantly calculating effort of law-governed



eye and hand. Having taken this position, the student will start from the point *a*, and with all possible caution try to imitate *a f*. It is imperative that the whole of the line be kept in view, so that there may be no "turning either to the right hand or to the left." This *a f* must "lie evenly between its extreme points," or it is not a straight, but a crooked line. Courage and patience, good reader! The difficulty is not insuperable!

The student must proceed in the same way with *b g*, *c h*, etc., and, whilst drawing them, look constantly at the preceding lines, remembering, in beginning to draw each one, that he place his hand in the position before named.

An impartial and severely critical examination must now be made of this first attempt, as seen in fig. 3. And the reader will find it greatly to his interest rather to search for doubtful errors than to blink or excuse unquestionable faults. Now what, after a careful comparison of the copy with the original, is the student's unbiassed opinion of this effort of his? How many glaring errors has he perceived? The result of his first trial is fit for nowhere but between the bars of the fire-grate. It is weak, incorrect in calculation of length and breadth, and in the estimate



of the distance between the lines individually, and it is as incorrect generally as inexperience can make it. The figure is not a square, the lines are not straight, the minor distances are not equal to each other, and the whole copy is poor and powerless.

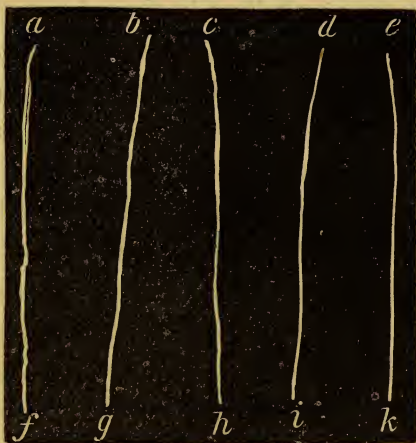


Fig. 3.

The result appears disappointing. The copying of this figure has taken at least half-an-hour's intense work, and the outcome of this work is "fit for nowhere but between the bars of a fire-grate!" And we apprise the reader of the fact, that no other than this is likely to be the result for some time to come. The mind and eye must struggle earnestly towards clear and certain vision, and the hand must be curbed into willing subjection before a wise student can feel satisfaction at the outgrowth of his labour.

Let the reader try again. He must commence in the same manner, and, in fact, go through the same

process from beginning to end. There must be the same painstaking in the calculation of the distances and the joining of the points together. If it be necessary to repeat the trial a score of times, let the repetition be gone through.

We have laid thus much stress upon the acquiring of the power to draw a straight line, because of the amount of small work (especially in chalk), of "wonderful fine effect," which now passes current for good drawing in some artistic circles. How strongly excellent was the fine hatching of such engravers as V. Gucht, in "the old days when there were giants," in comparison with the mean, contemptible niggling in the working up of shadows at present. The student must become a good *line* draughtsman.

If the reader can draw the first example firmly and with certainty (but not in any case otherwise), he may try his hand with fig. 4. It consists, like fig. 2, of five straight lines, but their position in this case is horizontal, not perpendicular. In no other respect do the two examples differ. But the student will find it more difficult to copy the present one than was the case in his imitation of the other. Of course, it will require no greater powers of mental or visual calculation to measure fig. 4 as accurately as fig. 2; but the position

which the hand is forced to take in drawing a horizontal line, whether from left to right, or from right to



Fig. 4.

left, is much less easy than the position it assumes in drawing one that is perpendicular. The latter is produced by a down motion of the second and third fingers in a line with the little finger, the base of the hand during the stroke, whilst in the former case the second and third fingers are moved sideways over this base, which is consequently liable to be shifted from its situation. For, in the drawing of any line, the student must not alter the position of his board to render his task less difficult. Whatever angle the line may make with the edges of the board, it must be produced with-

out displacing the latter in the least, or in anyway attempting to make the drawing of it the same as the drawing of a vertical one.

The points representing the extremities and minor distance of the figure, must be made as in the case of fig. 2 ; and when about a hundred copies of this example have been done, slowly, steadily, and surely, the student may proceed with the next figure.

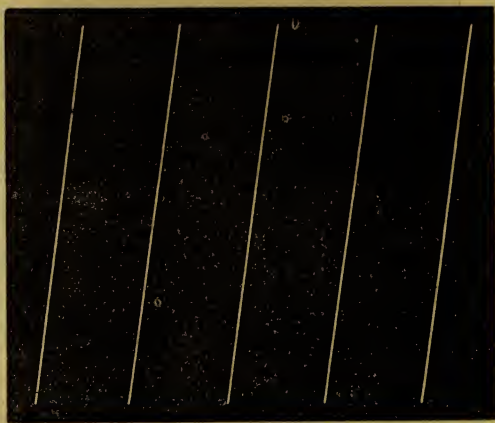


Fig. 5.

Figure 5 will be found easy of imitation. In fact, the hand takes more kindly to the drawing of an oblique line in this position than to the drawing of a perpendicular. No special instructions need be given in relation either to this example or to the one following. If

the preceding illustrations have been faithfully copied, the student will know immediately what he has to do when figs. 5 and 6 are placed before him.

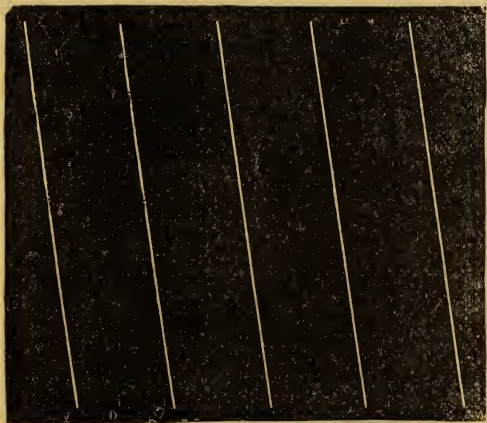


Fig. 6.

These oblique lines may be varied indefinitely. The angle of inclination may be changed to any extent less than  $90^\circ$ ; and we would recommend the reader to form figures of such varied lines for himself, and carefully proceed with them in accordance with the directions already given.

And when the student has arrived at something like a fair amount of facility in the making of a straight line in any given direction, his hope of future triumph rests on no unsubstantial foundation. Some of the

hardest grinding will have been gone through, and the remainder of the road will be in everywise pleasanter. "If we have taken up any special employment,—say a study by means of books, say an art to be wrought by pencil and colours,—the pleasure it yields us as we go on is a motive for our still going forward."\* Not that we would urge the student to "go forward" in learning this art of drawing solely for the pleasure he will have in acquiring a knowledge of its principles and practice ;



Fig. 7.

but the future labour of the student will be, as we have said, of an altogether pleasanter sort, and we now ask

\* LYNCH : *Lectures*.



his attention to a few compositions from these simple elements.

Fig. 7 represents a square, a composition of figs. 2 and 4.

In copying it, four points will be determined upon to represent the extremities of the figure, and lines produced from these points in the way previously explained.

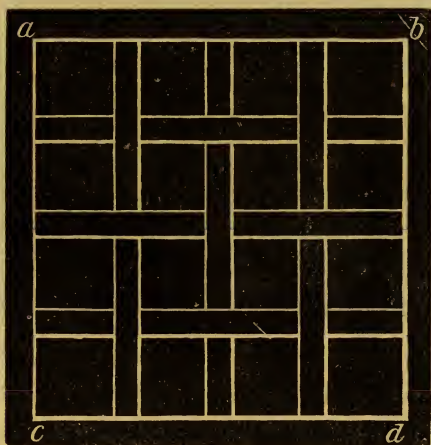


Fig. 8.

This figure (8) is another combination of the same primarily essential lines. In the drawing of it, the extremities, *a b, c d*, will be determined as before, the outside of the figure produced, and upon these boundaries the minor distances marked.



Fig. 9 combines the vertical, horizontal, and oblique lines. The points *a b, c d*, having been determined and joined by the boundaries of the figure, the lines *a d, b c*, should be drawn. The points representing the minor

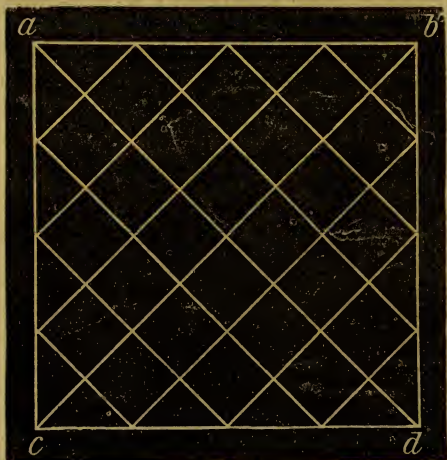


Fig. 9.

distances will now be marked out upon the side of the square, and these joined together by oblique lines, as in the example.

Fig. 10 is a composition having in it the same kind of lines as fig. 9. There is, however, this difference between them, that whereas the oblique lines in fig. 9 are all at right angles with each other, the lines in fig. 10 are of different degrees of obliquity. The

method of copying this example will be readily understood.

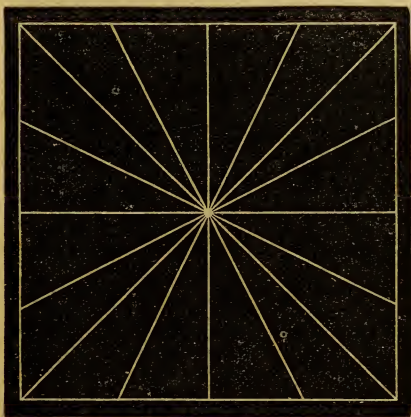


Fig. 10.

Fig. 11 is an equilateral triangle, consisting of a horizontal and two oblique lines. In copying the figure, the student will first draw the horizontal line  $a b$ , and having bisected it (that is, divided it into two equal parts), he must produce the faint line  $c d$  at right angles with  $a b$ . Upon  $c d$  he will set off a distance ( $c e$ ) equal to  $a b$ , and from the point  $e$  draw the lines  $e a$ ,  $e b$ . We have already warned the student against any adventitious aids in the measuring of his distances. We hope there is no reason again to taboo

compasses in free-hand drawing. Let the work be done fairly and honestly, or not at all.

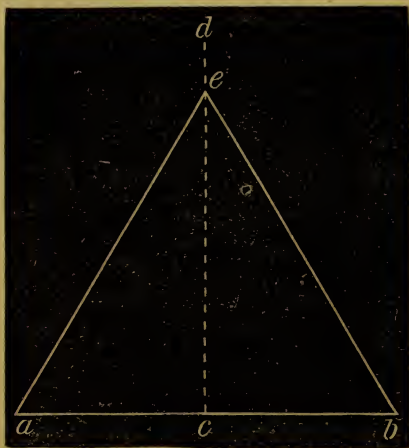


Fig. 11.

The copying of these examples of straight lines will have given the student some power of hand, and a habit of calculating distances correctly—two preliminary qualifications which will be called into especial requisition during the immediately following part of his artistic career. Next in gradation of difficulty comes the *curved* line—from the simple upright in-and-out curve to the circle. Intense care, and real downright hard work must characterise the student's action in his attempts to copy the examples about to be

given ; but the flowing beauty of the lines will make his labour lighter. Let him examine his work with the same impartial eye by which his former efforts have been scrutinised. Let there be no favour shown to a fault, but with entire and open honesty of mind let the errors be acknowledged, and carefully corrected in the next copy.

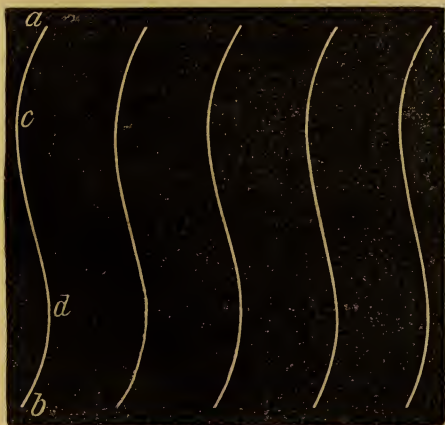


Fig 12.

Fig. 12 is an example of a very simple elementary curve. In copying fig. 12, the great desideratum is getting of first line, *a b*, correctly drawn. The method is as follows :—Determine the points *a* and *b*, and afterwards set off from an imaginary straight line running from *a* to *b*, the points *c* and *d*, which re-

present the extreme outward flow of the curve. Then, starting from *a*, draw the line with constant watchfulness of the copy. The four remaining lines will be produced with much greater ease, as the line *a b* will serve as a guide. In each case the extremities of the lines should be determined and represented by points before the drawing of the curve.

Fig. 13 in nowise differs from the last example, except in position. The directions given for drawing that example will apply to fig. 13.



Fig. 13.

Similar curves may be drawn by the student in the direction of the lines in figs. 5 and 6. He will, if he

be ingenious, multiply examples of this curve, and copy it in all directions,—vertical, horizontal, and oblique.

The drawing of an ellipse, fig. 14, can now be attempted. A straight line, *a b*, may be produced to divide the ellipse in two parts, and the example must be copied with a careful recurrence to the position of this line relatively to the two halves of the figure.



Fig. 14.

Fig. 15 is similarly copied. The difference between figs. 14 and 15 is, that whereas the curves of the latter are parts of circles, there is no portion of the former which could by possibility be described with compasses.



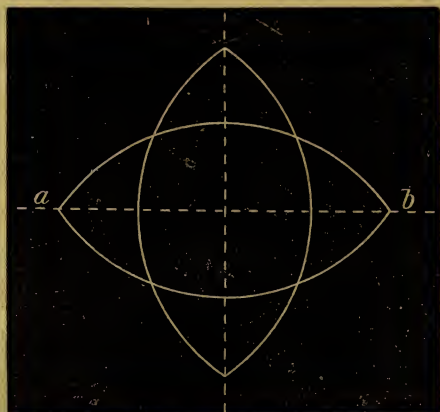


Fig. 15.

This figure (16) is perhaps the most difficult of all for

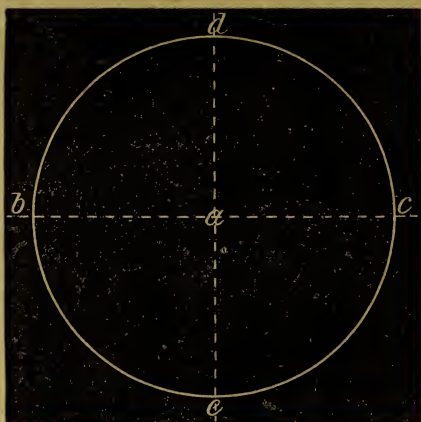


Fig. 16.

the free-hand draughtsman to deal with, and it is con-



sequently no wonder that the facility of Giotto in describing it with one uninterrupted stroke of his pencil should have become proverbial. It requires the utmost nicety of calculation, and the greatest power and delicacy of hand to make anything like a fair approach to perfection in the drawing of it. The difficulty of making a straight line is as nothing in comparison. In the case of drawing a straight line we can determine, by an instant's clear scrutiny, whether we are working rightly or otherwise; but in the drawing of a circle there needs a constant recurrence to a central point, the connection of which with the circumference is invisible. Several methods of making a circle have been suggested to the free-hand student. Among the worst is, we think, the following:—"Having drawn a circle of any given size with compasses, the pupil should work other circles round it at different distances by hand." We suspect there is about as much likelihood of a pupil becoming a Giotto by this means as there is of that youth becoming a Sir Edwin Landseer who copies animals on a transparent slate. The most rational method is, in our opinion, the following:—Let  $a$  be the centre of the circle (fig. 16). Through  $a$  draw  $bc$  and  $de$ , and upon  $bc$  and  $de$  set off points equidistant from  $a$ , which shall represent the circum-

ference. The figure must then be drawn with undeviating attention to the copy, which should be divided as in the example. But whatever has been his care, either in marking off the distance or in pencilling the curve, the student will be surprised, on a comparison of his copy with the original, at the weakness and the poverty of his effort. If it be true that "nobody can understand the excellences of a work without putting his hand to it," it is equally true that nobody can, without the same experience, understand its difficulties. But these difficulties will clear away in time before a hot purpose, and strong perseverance in carrying out that purpose,—"*Labor omnia vincit.*"

A great number of circles of different dimensions should be drawn, and we suspect that no inconsiderable portion of Mr Ruskin's "hundred and fifty hours' hard work" will be taken up in the mastering of this single task. When the student can dispense with the help of the rectangular lines he must do so. These guides should be retained no longer than is strictly necessary; and we advise him to adopt the habit of throwing away all crutches in learning this art as soon as he can do so with safety.

Now, let the reader, before going further, bethink himself for a moment of what he is able to do, of what

he has already accomplished. He can do two things as the result of his grinding at these lessons on the simple elements. He can make a straight line, and he can make a curved line; perpendiculars, horizontals, and obliques, simple curves and difficult curves, he can judge of and draw.

Combinations of the figures which have been already given may now be attempted. These may be multiplied to any extent, and two or three examples of the fashion in which this can be done are furnished herewith.

Fig. 17 is a composition of the perpendicular, hori-

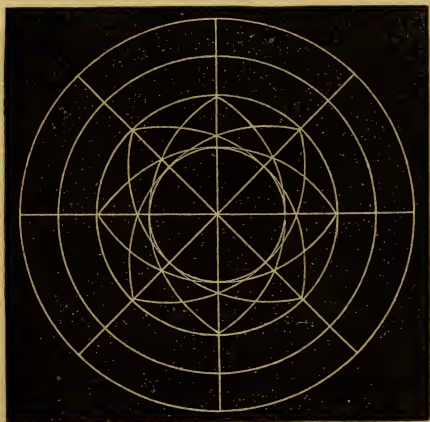


Fig. 17.

zontal, and oblique lines of fig. 15 and the circle. Its construction will be readily understood by the student.

Figs 18 and 19 need no special explanation.



Fig 18.

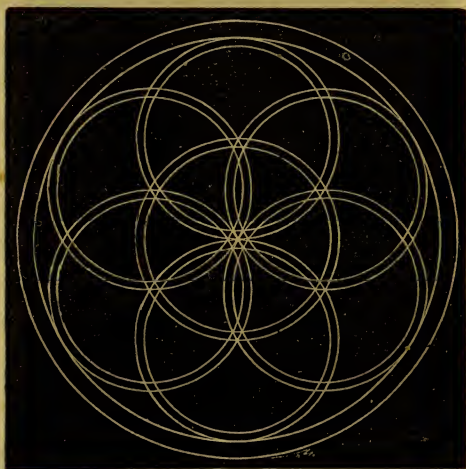


Fig. 19.

The student is now invited to the study of *Shading*

## CHAPTER III.

### SECTION III.—ON SHADING.

IF we look at any solid object, we perceive that the side which is turned from the light is of a deeper tone than the one which is turned towards it, or, in other words, the side from which the light is excluded is *shaded*. Thus, in fig. 1, Plate I., the light is supposed to be falling from the upper left-hand corner of the page.

Those parts of the figure, consequently, which are opposite to the said corner, or to which the light cannot get by reason of some obstructing cause, are darkened or shaded. The top of the object projects over the body, and a shadow is thus thrown upon the surface immediately underneath this projection. The ground, likewise, directly to the right of the figure's shaded side is darkened by the intervention of the object between it and the light.



From which statements the two following elementary principles of shading may be deduced:—

*Light falling upon one part of an opaque object is prevented by that opacity from getting to some other part, and this latter is termed the shaded portion of the said object.*

*The shadow caused by the opacity of an object is not confined to the body itself, but is thrown upon some other body.*

But further, if the student take two books (or any plane objects), one in either hand, and hold them before a window, he will find that the light which falls upon the one farthest from the window is reflected or thrown back upon the shaded side of the other, which, consequently, becomes quite different in intensity of tone. We will give another illustration of our meaning. The student has probably read up a little in astronomy. If so, he will be well acquainted with the fact that during the first quarter of the moon, when its form is like a silver bow, there is resting within the delicate meniscus the darkened portion of the moon's body, which is, however, slightly lit up with a strange, weird shine, like the dim paleness of the glow-worm, sufficiently so, however, to relieve this

darkened portion against the sky beyond. This is caused, as he will know, by the light which the sun throws upon the earth's surface being thence reflected or thrown back upon the body of the moon. If the student see clearly the full significance of this fact he will be able to understand the next fundamental principle of shading.

*The light cast upon an opaque object is reflected.*

But again : If a globe of any kind be placed near a strong light, the student will not only be able to recognise the roundness of what he sees of the figure's circumference, but will likewise perceive that the portion of the object inside this circumference is also round. Let an astronomical globe be taken, for example, and placed near the window, the student will immediately understand that the body of the object is not plane but spherical. There is a point, the centre of the circumference, to which all the other portions of the surface regularly gradate, its distance from the outer edge being  $90^{\circ}$ , or a quarter of the circle. Now, how is it that the student can perceive this? Why does he understand so clearly that a globe under this condition of light is not a mere plane? Certainly not because of its outside form, nor because of its colour. Whatever



the latter may be, the fact of the object's roundness is equally realised. The reason is, there is a regular gradation of light and shade over the whole surface of the figure, and so trained does the eye become in time as to perceive this gradation with most delicate instinct (that is, the eye which is naturally fitted for such perception).

From which statement the following additional principle may be deduced :—

*Gradation of shade gives the appearance of roundness.*

These simple elementary canons will not give the student much difficulty either in the comprehending or applying of them. We recommend him to get them thoroughly inwoven into his mind, and on every convenient occasion to try if he can find out their influence upon his ideas of the forms of the objects he sees. In fact, the remaining portion of these lessons will not be by any means so easily understood if these canons be not committed to memory, intelligently realised, and readily applied.

In commencing to shade, the student will, in the first place, form (by the hand, of course) half-a-dozen squares of about the same size as fig. 2, Plate I.

These should be drawn in a row. He will commence to fill them up with straight lines in any direction he pleases, taking care, however, to keep the same distance between them, to have them of the same thickness, and to confine them inside the square. These must be crossed with others at an angle somewhat the same as those in fig. 22. Let these be again crossed until the required depth of shade is obtained.

The important matter for the reader to bear in mind in filling up the squares is, that evenness of shade is the great desideratum. For, as the power to draw a straight line lies at the root of all free-hand drawing, so the power of laying a level shade is the foundation of the draughtsman's second stage, as colouring and composition are the bases of his final sphere of development. Unless he have the power to shade evenly, he must never expect the ability to produce a gradated shade; for the fine delicacy of perception and handling necessary in the latter case is not as strongly demanded in the former, which is the natural, and indeed the only, introduction to the other. These squares, then, must be "ground" at until this power is obtained.

The half-dozen squares which the student has upon his paper must be filled up with shades of different

depths, beginning with the lightest (fig. 2, Plate I.), and gradually intensifying the shade until the depth of fig. 4, Plate I., is obtained.

In the working up of fig. 3, Plate I., the student must seek to obtain the required levelness and depth by means of pure cross-hatching; that is, by the simple crossing of the lines. This hatching is, indeed, as we have intimated, the highest and noblest kind of shading. It demands the constant discipline of the mental, visual, and manual powers; is in everywise a strong, honest kind of work, full of praiseworthy labour and truthfulness. It may be necessary for the student, in the beginning of his practice, to dot or stipple-up with a finely pointed pencil those portions of his shade-surface which want of power has left too light; and, on the other hand, to take out with the "sticky"\* those parts which wilful handling has made too deep. But the use of these non-essential aids should be dispensed with as soon as possible, and there is no more certain mode of getting the ability so to do than to become thoroughly master of the use of the line in shading.

The "sticky" just adverted to is a preparation of

\* This elegant name for the substance alluded to is the one current amongst art students.

the common india-rubber. The manner of making it is as follows:—Get a piece of india-rubber, and subject it for two or three days to a gentle heat in the oven. It should be placed in a piece of earthenware, and if the heat can be made constant, the better will be the “sticky.” When it becomes about the consistency of dough it is ready for use.

The following is the way of using it:—Roll a small piece, about double the size of a pea, between the finger and thumb, until it gets to a fine point. Press this point carefully against the spot to be taken out, and suddenly draw it away, when it will be found to have produced the required result. Care must be taken that the “sticky” be not too hardly pressed upon the paper, as it will spread out and take more of the pencilled surface off than was intended.

The student will not neglect the advice given before, concerning the examination of his efforts. When he has completed his copy of fig. 3, Plate I., it will be well if he ask himself such questions as the following in relation to it. Are the extremities of the copy accurately measured and drawn? Is the shading of the same depth as that of the example? Is it even? And so on. This habit of after-examination will have almost as much to do with the student's

ultimate success as the discipline of his hand by exercise.

The squares, figs. 2 and 4, Plate I., should now be filled up. They will require as much careful working as the one already done, and their gradation of depth must be specially attended to, so that there may be no violent difference between those which are next to each other, but a regular increase in intensity from first to last.

Fig. 4, Plate I., will be readily understood if the foregoing instructions have been attended to.

The student will need to practise these squares for a long time. It is a good plan to stretch as large a piece of paper as he can on his board, and having filled it with outline-squares all over, six in a row, to shade them up until all are done. He should repeat the operation again and again, preserving the sheets as they are finished ; and, as each one is filled, comparing it with the ones previously done, in order to test his progress. Nothing but immense practice will give him the power he is striving for. Downright, honest work is the only method of attaining it.

When, after an unbiassed judgment upon his efforts, the student is satisfied that he possesses this power, he may try his hand with a graduated shade.



The gradation of the squares with which he has been busy, will render the task before him much easier than if he had confined himself to one degree of depth. He will find the benefit of his former practice as soon as he commences the copying of fig. 5, Plate I.

Let him, in the first place, examine the figure. It consists of an oblong, the shading of which is in no two parts of its length the same, and yet there is about it such regularity of gradation, that the position within its extremities cannot be defined which is noticeably different in depth from the portions immediately connected with it. The copying of this figure well, needs fine feeling, a correct eye, and a well-disciplined hand. The darker shade will be roughed-in first with a BB pencil, and the figure worked up towards the lighter end with a HB, used with great care and delicacy.

A sphere, fig. 6, Plate I., may now be attempted. The student will draw the circumference in accordance with the directions given relative to fig. 16. The darker portions will then be filled in, and the whole worked up after the fashion with which the student will by this time be practically acquainted. It is necessary to mention, however, that the lines used in hatching, in the shadows of this figure, as well as of every other figure with a rounded surface, must be curved, and not

straight lines. If we may so speak, the grain of the body, or the direction of its surface, must be represented by the shape and direction of the lines used in shading it. Thus, in the shading of fig. 6, Plate I., there is not a straight line to be seen.

Indeed, strict attention to this principle is one of the main features of a good draughtsman's work. Mr Ruskin, in his "Elements of Drawing,"\* has a drawing of a tree of Titian's, or Durro's (we forget which), whose bark is extremely well given by the direction of the lines that represent it, and it is precisely in the ratio of the draughtsman's greatness that such peculiarities as these dominate in his efforts. The student must come to feel this through his practice. No amount of words will, without this, ever place the full significance of the principle before his view.

These, then, are the simple elements of the art of Free-Hand Drawing. The power to be acquired is, as we have shown, fundamentally a single power. The drawing of a line lies at the root of the whole matter. But we naturally make two divisions of this funda-

\* An admirable book, full, as all Ruskin's books are, of noblest appreciation of the beautiful in nature, and of profound artistic wisdom.



mental ability, viz., that which concerns itself with lines, straight and curved, simply, and that which develops itself in shading. And the possession of this fine power constitutes the free-hand draughtsman as such.

But there are some subordinate considerations connected with these elements with which the student must have acquaintance. He will find them in the following chapter.

## CHAPTER IV.

### CONCERNING LINES AND SHADING, WITH APPLICATIONS OF THEM TO SIMPLE ELEMENTARY SUBJECTS.

THE student may be supposed by this time not only to have become tolerably clever in pencil work, but also to have made some observations with reference to various artistic matters out of his own practice, and also from the efforts of others. And if this be so, there is a probability that he will have noticed especially the powers of indication and expression which exist in a line.

The student should search in his flat subject for an explanation of the reason why the lines are peculiarly expressive in the position they occupy ; for the quality of expression in a composition depends very much upon the kind of lines used to convey one's meaning. The full flowing strokes which Tenniel uses to delineate Mr Bull in the *Punch* cartoons are as necessarily different from the thin and starved ones employed

to portray a used-up conspirator as the characters intended to be represented. The reader will, then, be on the look-out in the subsequent examples in this book, and also in all the illustrations which may fall in his way, for an answer to such questions as these, viz.:— Why is a strong line used here? or a weak, or straight, or curved, or jagged, or double line there? Why is this subject shaded by flowing lines, and the other by direct lines, vertical, horizontal, or oblique? Why is it but roughed-in here, and carefully cross-hatched there? Of course, the student will not concern himself to get these problems solved in relation to any but good illustrations.

But the practice of the student must keep pace with his knowledge of style. While exercising his powers of observation, he must at the same time exercise his hand. And he will do well to copy re-

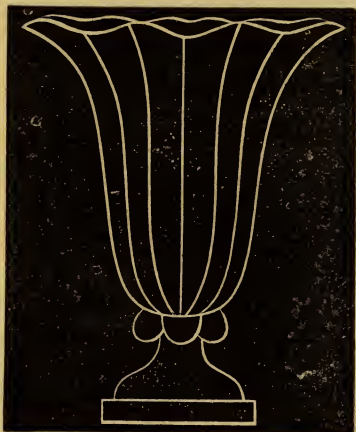


Fig. 20.

peatedly each of the simple examples which follow, until he can say, with clear satisfaction, that he has

mastered its difficulties, and prepared himself thus for the copying of the next.

There is a good deal of useful practice both in fig. 20 and fig. 22. In each of them there is a combination of lines, which will call into action the highest faculties that the student has as yet acquired. The double line (see figs. 23, 24) is likewise used to indicate the shadows



Fig. 21.

faintly. The reader should be able by this time to point out, from the most cursory examination of these double lines, which parts of the figures are supposed to project, and from which point the light is supposed to fall. The manner of copying fig. 20 is as follows :—First draw

the straight line in the centre of the example (see fig. 21), and with this as a guide, dash in a stroke which shall represent the boundaries of the top of the object. The general direction of the curves may then be either faintly indicated by straight lines likewise, or if the student have the confidence and the power to copy them

correctly without such help he may do so. Such a power, however, it is most likely he does not possess; and as in copying from the cast or the living figure he will be forced to adopt this system of indicating his subject roughly by straight lines, he had better begin now to practise it. The remaining portion of the figure having been *felt for* after this fashion, and an examination of its correctness made, the lines which are to be replaced by others should be rubbed with the india-rubber until they become so faint, that while they serve as guides in proceeding with the figure, they will not disfigure the sharpness of the drawing when finished.

Fig. 22 is drawn upon the same principles as the preceding example. A basis of straight lines is first to be obtained, and these will serve as guides for the working up of the drawing.



Fig. 22.

The student may now attempt the copying of the two heads given here (figs. 23 and 24), as examples of the expressional power of the line. They are taken from



drawings of the celebrated French painter, Le Brun, and are fine instances of what may be done in the domain of art by the simplest means.

In fig. 23 the artist has contrived to concentrate, in a few sweeping lines, an expression of horror so complete, as almost to make it questionable that it would be possible to increase the intensity of that expression by any subsequent addition of shade or colour. The



Fig. 23.—Horror.

brows drawn tightly inwards and downwards over dilated eyeballs, and the disparted lips, are given with unerring judgment and the subtlest perception of the value of every stroke. In some places the lines are thicker than in others, and they are now and then delicately doubled, in every case with the utmost exactitude of calculation. The artist understood perfectly the value of each sweep of his pencil. With him all the problems which at present bewilder the student were as the commencement of the alphabet to an Oxford professor. He knew perfectly well what he was about, and would perhaps have smiled at the simplicity of an inquirer who might have asked the reason why a thick line was employed in this place, or

a double one in the other. What fine power is shown in the curves of the eyes in fig. 23 ! How exactly the face is balanced, at the same time that the lines are all strictly subordinated to the expression of horror, which so completely fills the face as to make it almost a terror to look upon ! And thus the student will make observations upon the example given, and seek to get a knowledge of its subtler characteristics before proceeding to copy it.

In the drawing of it, the fundamental straight lines which the student was instructed to use in the two preceding figs. will be adopted here likewise. He must, in fact, in every one of the subsequent examples, feel his way, and, by making frequent comparisons as he goes on with the work, acquire the habit of *progressing* correctly with it. It is a bad practice to get a drawing in anything like a completed state before the student tests its accuracy of measurement. We have frequently enough seen students in our schools of art, busy with drawings that could not, by any amount of admirable working up, be rendered eligible for prizes, through inattention to the practice of progressive calculation. An outline for a chalk drawing of a head, may, for instance, have been roughed-in with charcoal. Fearful for the permanence of the outline, and appre-



hensive that it may be destroyed by friction in the study-rack, the student has applied the chalk to the drawing before leaving off work for the evening. When he resumes his study, he permits himself to be deluded into the notion that his outline is correct, although the essentially necessary process of comparative measurement has not been gone through. As usual, the nose is roughly shaded with the No. 2 chalk ; the shadows of the eyebrows are likewise dashed in ; and it is not until the error is past retrieving that the student fully acknowledges his foolishness. He becomes disgusted with his work ; its falsity is every day more painfully evident to him ; and it is not unfrequently the case with new students that they hurry through with this piece of practical repentance, not even having the prudence to make the best of a bad job. Let this habit, then, of insuring accuracy by frequent calculations during the progress of the work be cultivated by all means. Upon the straight lines obtained as a basis, the curves will be drawn, when the accuracy of the measurements has first been determined. A great point to aim at is the finishing of the drawing with such sharpness of line that it cannot be perceived the pupil has availed himself of any such helps as these fundamental straight lines. It would, of course, be better if he could do

without them. There is do doubt of its being in every way a preferable plan to dash in curves and all other sorts of lines with one unnerring sweep of the pencil, *if it can be done*. But then, despite the long practice with lines that the student may now be supposed to have had, he cannot hope to have attained, and in all probability will not have attained, to such marvellous proficiency. He must, therefore, adopt the method we have just been recommending. Let lines be drawn as bases for the final sweep of the pencil; and when the accuracy of these is found by careful calculation to be unquestionable, the study may be finished with some amount of certainty.

Fig. 24 represents a union of hatred and contempt. The observations made, and the instructions given in relation to

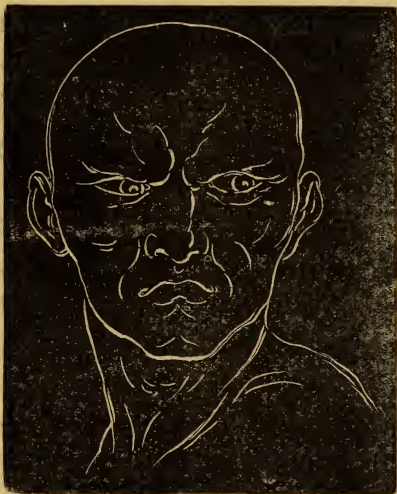


Fig. 24.

fig. 23, will apply with equal force to this example. A thorough comprehension of the peculiarities of the

head will be obtained by the student before he attempts to copy it. He will take particular notice of the employment of thick or of double lines, and get to know the reason why such lines are used. The example is a very fine one, and cannot have too much of the student's attention.

Simple developments of the union of line and shadow may now be attempted. And, in this stage of the pupil's career, it will be well to remind him that the illustrations selected for this work are chosen, not as belonging to any particular department of drawing,—figure, landscape, or ornamental,—but as progressive examples taken indiscriminately from any department, because of their fitness to simplify our remarks on the elements of the art of drawing. For in this little book we are not purposing to include an account of figure or landscape drawing at all, but simply to lay down such elementary instructions as will fit the reader, if he follow them, for the study of these said branches. Our intention here is simply to give a general idea of the theory and practice of drawing.

The drawings in Plate II. will afford good practice. The outline, as in fig. 1, having been correctly obtained, the shading must be put in with constant reference to the direction of the lines in the drawings. For, as will

be observed, the grain of the surface is attempted to be given in the example by this direction of lines ; but so much has been previously said on this point that we have no need to dwell specially upon it here.

Fig. 2, Plate II., will be similarly copied. This illustrates the same principle, and will, at the same time, exercise the manipulative powers of the student. The head is taken from one of Annibal Carrache's decorative figures at the door of the Farnese Gallery. The shading is very strong, but notice must be taken of the fact, that the edges of the shadows are rounded off wherever they occur. This is, of course, caused by the surface of the object being round where the shadows are thrown.

Fig. 3, Plate II., is taken from the same series of figures. The student will easily trace upon some portions of the face the influence of reflected light. In copying all these examples, the darker portion of the shading will first be roughed-in with a BB, and the finishing of the drawing accomplished by a HB.

The student may, however, wish to begin *chalk work*, and if he decide on copying the examples just given in this material, he will find the following general observations upon the subject useful.

The great beauty of good chalk shading is often not less a source of wonder than of admiration to the pupil.

The fine lithographs of Jullien, or Josephine Bucollet's studies, to be seen in the windows of our artists' colourmen, do not excite his astonishment; but a well-executed chalk drawing, in which the working-up is finer than in the lithograph, is to him a matter for unqualified wonder. It is to lessen this astonishment, and to put the pupil in the way of being able himself to produce this effect, that we invite his attention to the following remarks:—

The chalk used by the schools of art for point work is generally made up in cedar sticks, after the fashion of black-lead pencils. These are usually marked "HCA, Paris;" and the number of the chalk is likewise printed upon the stick. This number indicates the depth of the tint—No. 1 being fine and hard, answering in general quality and use to one of Rowney's HB black-lead pencils; No. 2, darker and softer than the former, is similar in depth of tint, etc., to the BB pencils of the same maker. The chalk sticks are buyable at twopence each, at any of the shops where artists' materials are sold. The quality of chalk pencils is, unfortunately, not uniform; and there is no way of determining whether a stick be a good one or a gritty one but by cutting it. It frequently happens, however, that a pencil which promises badly, and chips off



at the beginning, though the knife be used upon it with the utmost delicacy, becomes better towards the centre.

The chalk-point is generally made much longer than that of the lead pencil. For very fine work the student may cut into the wood about two inches from the end. The knife should be used as carefully as possible, the exposed chalk being supported upon the left-hand thumb. At the school of art where we studied, one of the pupils invented the method of filing down the point when it became dangerous to make any further use of the knife. For this purpose a very fine file must be procured; and the whole of the exposed chalk being supported upon the soft flesh at the end of the first finger of the left hand, the file must be employed upon it with the greatest delicacy. The slightest carelessness is certain to end in the destruction of the point.

It is necessary, also, that the quality of the paper should receive attention. As in water-colour drawings, so in chalk. Very much of the ultimate effect depends upon the granulation of the paper. The best is that sold in our schools of art at eightpence the sheet. It can be obtained at any of the shops before referred to.

The paper having been stretched upon the board,

and the subject rightly placed, the outline will be sketched-in, or indicated by, fundamental straight lines. For this purpose a piece of charcoal (buyable for a half-penny a stick) must be used. After these straight lines are ascertained by careful measurement to include the subject accurately, they may be replaced as before stated, and a careful charcoal drawing made of the subject, the shadows being put in with as much circumspection as if the student were using chalk. A rigid examination of the drawing will then be made, and after everything is found out to be undoubtedly correct, the No. 2. chalk will be used to run over the charcoal outline, and also to indicate faintly the boundaries of the shadows. A handkerchief, or a soft badger brush, will then be employed to dust off the charcoal, and this should be done as completely as possible. It sometimes happens that, from a very heavy use of the charcoal, it is difficult to get it well off the paper, and this is more especially the case where frequent corrections of the shadows have had to be made. When the paper is thoroughly cleaned, the student will employ the No. 2 chalk to cross-hatch-in the deepest shadows all over the drawing. It is usually the custom in schools of art to give the pupil who is commencing chalk-drawing a subject which admits of a large expanse of flat back-



ground. This is a very sensible plan, and we would recommend the student, in commencing chalk-drawing, to choose such a subject. An ear or a nose, occupying one-quarter of the paper, is suitable; but whether he labour at a background or proceed directly with his subject, the method of working the chalk is the same. Fig. 4, Plate II., will give some idea of it. Parallel lines about an inch long, and with an equal distance between them, are drawn generally from left to right. These lines should be thickest in the centre, and gradually decrease in thickness from that point to the extremities. Crossing these at the right extremity, lines of a similar character must be drawn, and so on until the required space is covered over. Other lines will then be drawn across the former ones, and this operation must be repeated until the whole of the paper intended to be shaded is so covered as that the trace of the lines shall be lost.

The foregoing remarks are mainly applicable to the deeper shadows of the drawing. The student must adopt a different method with its lighter portions. Having sharpened his No. 1 chalk to most extreme fineness, he should take the uncut end of it between the first fingers and thumb of his right hand, and run the point quickly and delicately over the part he pur-

poses to cover. This will give him a level surface, but in order to impart to it a fine tone, he must finish by stippling.

We remember a fellow-student of our own who became so good a master of cross-hatching, that it was not necessary for him to fill up even the lightest portions of his chalk surfaces by stippling; but in ninety-nine cases out of a hundred the student will have to resort to this method of making level those portions of his drawing which would otherwise be too light. Some parts of the surface will likewise be too dark, and here and there the darkest shades will be disfigured by small black patches, which become offensively evident if the student step back from his easel to make a general examination of the drawing. These will be removed by the application of the "sticky." A small pellet of it, rolled to a point between the fingers, and pressed upon the black patches aforesaid, will accomplish the desired result. Care should be taken that the pressure be not too great, or the surface may be damaged by the "sticky" spreading too extensively.

The two hands (two views of each) here given are reduced from chalk drawings, taken from casts commonly used in the Government art schools. They will afford excellent elementary practice with the chalk.

Fig. 1, Plate III., is the outline of fig. 2, Plate III. In the drawing of it, straight lines will be drawn (to the number of about half-a-dozen in this case), which will include the outline of the cast. Other straight lines, indicating the fingers and remaining details, may then be put in, and the outline finished in accordance with the instructions already laid down.

Fig. 2 is the finished drawing of fig. 1, Plate III. After the finishing of fig. 1, Plate III., and when the drawing is outlined in chalk, the student may commence putting in broadly the deeper shadows of his subject with the No. 2 chalk. These will be hatched-in freely, and the rounding of them off delicately accomplished with a finely-pointed No. 1. The lighter portions of the surface will be grounded likewise with a No. 1.

Fig. 3, Plate III., is the reversed view of the same hand. The outline is a difficult one, and will need much careful calculation.

No special observations are needed in relation to fig. 4, Plate III. We may just remark that the outlines and finished views of these casts are given separately, as it renders the drawing of them so much easier.

The distraction of mind caused by finely-gradated shadows is peculiarly trying before a long experience

has enabled the student to distinguish clearly the direction of lines. We therefore give the outlines and finished subjects separately.

The hand pressing the nipple (figs. 1 and 2, Plate IV.) is taken from an admirable cast. It is finely fore-shortened in the woodcut, and, as will be seen, without any excessive outlay of labour. The student will most probably find himself greatly indebted in this case to the outline drawing, as the fore-shortening will make the perception of the outline in fig. 2 more than ordinarily difficult.

In the working-up of fig. 1, Plate IV., the lines expressing the roundness of the hand at the back, as also of the nipple, etc., will be curved in accordance with the directions given in the first chapter for expressing rounded surfaces. It will be observed that this is carefully attended to in the woodcut, fig. 2.

Fig. 3, Plate IV., is the outline of another view of the same hand.

No special instructions are necessary in relation to fig. 4, Plate IV.

There is another method of using chalk, for the practice of which the student will require, in addition to his former materials, some French chalk (which may be obtained in small sticks, unenclosed in wood), and a

leather stump. The following is the method referred to:—Let the outline of the subject be first correctly obtained. Then file off some of the chalk, and catch the dust on a sheet of paper. Run the leather stump through this dust, and apply it to those portions of the drawing which are shaded deepest. A beautifully-level ground for working-up with the point is thus obtained; and a really fine effect may be produced in a short time by adopting this method.

We subjoin two views of the same head, which are suitable for stump work.

Figs. 1 and 2, Plate V., will need no further instructions as to the drawing of them, than are already in the possession of the student.

In stumping-in the shadows of fig. 2, Plate V., the dust may be applied first from the forehead to the chin, as the working-in of this large expanse of shade will form a good introduction to the more delicate stumping required for the lesser shadows.

In the case of these two heads, the student may with advantage copy them double the size they are given in the woodcuts. As a general rule, stump-work should be confined to large subjects.

The present chapter has already exceeded the length we originally intended to assign it. We have attempted



in it to direct the student's attention to the characteristics of excellent work in line and shade. We have also dwelt at some length upon the applications of chalk to artistic work, and have furnished him with a number of examples, specially fitted to illustrate the instructions laid down. Some general remarks upon object-drawing, and one or two other topics, with which the student should be acquainted at this stage of his career, will appropriately close this little work. As we have already stated, the departments of landscape and figure drawing will be treated of in subsequent numbers of the present series of drawing-books, to which the reader is referred for further developments of the subjects, which have been of necessity treated here in but incidental fashion.



## CHAPTER V.

### SKETCHING FROM NATURE.

ALTHOUGH the subject of sketching from nature falls naturally under the head of landscape drawing, and will be treated of at length in that department, yet a few remarks upon that topic, as well as upon object-drawing generally, will not be out of place here. For the student should, as soon as possible, make practical applications of his knowledge, and put his acquired powers out to their most extensive use. When he has obtained a fair amount of mastery over his pencil, and can express a depth of shade, or draw a line with some precision and accuracy, he will find it to his interest to practise the drawing of objects from the round, or to make simple sketches of easily-represented natural scenery. Almost any object will serve his purpose. Books, chairs, tables, vases, lamps, boxes, ink-bottles, fruit of all kinds; garments, as hats, coats, or shoes; rustic bridges, stiles, flowers or leaves from

hedges or gardens; fuschias, convolvuli, honey-suckles, common dock-leaves—anything, in fact, will do for a subject, provided it be simple enough. A glance at one of our earliest sketch-books will give the student some notion of this matter. The sketches are crowded together in wildest confusion. The first half-dozen pages contain such subjects as the following, viz. :—Portrait of a lady, a rustic bridge amongst the hills, three workmen smoking, half-a-dozen feet and hands, a caricature of a fellow-student, an ancient Greek frieze, a landscape showing the bend of a river in water-colour, three dock-leaves, a carefully-drawn ash-tree, a lioness gastronomising, an old barn, a hall in Yorkshire, a vase in high relief, a sheep, and a pinnacle in the perpendicular style! A sketch-book should be, in fact, the commonplace book of the artist, and in it he should record the transient flashes of his genius, and seek to make it a repository for the things which he ought not willingly to let die. Classification is here entirely out of place. Much of the charm which we feel in looking over these books depends upon the sudden bringing together of entirely incongruous subjects.

They are buyable at any price, from sixpence upwards. One of the ordinary form, with receptacle

for pencil, comes nearer to our ideal than the solid tablets lately brought up. The latter are more useful if a formal drawing be wanted, but for a dashing sketch, when you have but five minutes to make it in, the sixpenny book is the better. It admits, likewise, of being stowed into the pocket, out of the way, as soon as your sketch is done. An HB or B black-lead pencil will be suitable for use; perhaps the HB is, on the whole, preferable, as it is not so liable to rub off and dirty the opposite page as the B.

The student will find much pleasure in out-door sketching. It is a delightful occupation. Rambles through lanes when the honeysuckles are smelling fresh and sweet from the hedges, or by the side of sparkling streams which sing pleasant tunes to him while he stays to draw the lambkin lying down, tired out with its frolics, are passages in one's life to be remembered gladly. We have spent some of the happiest days of our life in this occupation with a chosen friend; and it was a point with us to make our evenings as much as possible like those of old Piscator and Venator, talking until late about art and artists at a village inn, and afterwards lying down to rest in rooms where "the beds looked white, and smelt of lavender."

Sketching has likewise its little drawbacks. Whilst

engaged with a landscape, we have more than once been interrupted by a shower which has drenched us to the skin. Frequently, too, living subjects prove very obstreperous. The lamb, fig. 47, Plate VI., was one of the most irritating animals we ever remember to have had to do with. We were out sketching during a certain lambing season, and as 47 appeared to be of a more sober turn of mind than his fellows generally, we whipped out our pencil with the intention of "taking" him. Our sketch (a front view) was in a forward state, when the subject, lifting up his head, caught a glance of us, and seemed intent for a moment on taking our bearings. Evidently deeming us a questionable case, he slowly rose, and favoured us with a full view of his opposite quarter. We waited patiently for his settling down again, which he did after about a quarter of an hour's leisurely cropping. His position, however, made it necessary that we should walk round to the opposite side of the field. Having taken up our new stand, we were just resuming operations, when he again quietly rose and walked off to the extremest corner of the field. He laid down there, but it was impossible, from his queer position, to finish our first sketch ; so we started with the view of him given in fig. 47. It was not, however, until he had made two or more removals that we

managed to complete our work. The student will view these small discouragements as necessary adjuncts to an occupation which pays in so many ways such good interest.

But before he tries out-door sketching, he should select some simple domestic subjects, and copy them. And in the placing of these subjects in position, he must adopt an arrangement which will furnish him with such lines for reference as he can easily understand. Let us make our meaning a little plainer. We will suppose a common window chair has been selected as a subject. The student will immediately perceive that there are a number of oblique lines about the legs, and of curves in the back and seat, which demand some vertical or other direct lines as standards to which they may be referred as tests of their accuracy. The obliqueness of the legs, and the variations of the curves in the upper part, can in no other way be so directly and certainly ascertained as by this of comparing them with unmistakable and easily-proved lines. These reference-lines are more readily attainable in a room than in the open country, where strict perpendicular forms, or indeed strict forms of any kind, are scarce; and this is one of the reasons why we recommend in-door rather than out-door sketching at the



commencement. The vertical lines of a door or window, of the mantelpiece, or the corners of the room, will answer the purpose well. The chair should be so placed as that all its forms may be easily referred to such a perpendicular, and the student will be greatly helped by adopting this plan for some time to come.

And herein lies one of the main difficulties of drawing objects directly from the things themselves. It is mainly in this particular that the student who has been accustomed to flat subjects finds himself at a loss when he begins to sketch independently of the medium of a copy. In drawing from the flat, he finds such reference-lines in abundance; and if the subject of his sketch be a landscape in which buildings are introduced, there are, of course, some perpendicular or horizontal lines which will serve his turn. By these he can measure the curves of the river, as it winds away and loses itself in the faint distance, like the dying music of an *Æolian* harp, or the rugged, fantastic twistings of the gnarled, crabbed, branchless old oak, through whose gaping rifts the winter wind blows with cruel bite. By these he can determine the gentle flow of the curves of the meadow, the majestic sweep or sudden savage fall of the lines of a mountain, or the forms of fierce thunder-clouds, round and black and threatening, roll-



ing in high rage one over the other, and muttering curses, big with bale and blast, to the hollow deep below! But how in the case of a landscape, where he has no such lines for comparison? How will he commence a sketch, the subject of which does not contain one such line for reference? As we have said, in drawing from the flat, the case is entirely different. These lines in a flat subject are numerous. The edges of the sheet and the edges of the drawing-board, besides such right lines as are to be found in the copy, will afford him most important assistance in judging of the various forms before him. But in drawing from the round he will very frequently be forced to supply their place by imaginary lines. In all cases, however, where vertical lines are accessible as standards for reference, he should place his subject in a position that will allow him to apply the test constantly. When the position of the object is square opposite, a horizontal line of reference will be found useful; but as a vertical one never changes its appearance,\* it is always to be preferred for a standard to compare with.

\* "Never changes its appearance." This statement is not strictly correct. A vertical line may, under certain circumstances, appear oblique in comparison with another vertical. As, for example, when

The remarks just made, naturally introduce some observations on certain facts, which the student should understand thoroughly in his commencement of object-drawing from the round. We have hinted at certain changes in appearance which lines undergo, with their changes of position. We have pointed out the fact that, whilst vertical lines always have the same appearance in point of direction, horizontal ones, on the contrary, alter in appearance. In other words, a horizontal line, or a line which forms a right angle with a perpendicular, when viewed square opposite, makes, when seen either to right or left or over or under the direct line of sight, some other angle, either acute or obtuse. And the degree of this acuteness or obtuseness depends upon the position of the eye with regard to the angle just mentioned.

Herein lies a most important principle ; and the student must get a firm hold of it before he proceeds with the ensuing lessons. The few general remarks which will be made upon the subject of perspective, spring out of this fundamental principle. It is, in fact, the initiative of much that follows, and we earnestly ask the student

we look up at a high tower from a position very near its base, its sides appear to converge at the top. But, in artistic compositions, these changes are never recognised, as they would contribute to give an entirely false notion of the object represented.

for half-an-hour's exercise of his power of concentrated attention, in which time we promise to give him some notion of that usually repulsive subject, "perspective."

It is by no means our intention to treat perspective at any great length in this place. We shall not enter into any minute geometrical description of the changes which lines, planes, and solids undergo in appearance by alterations of position. It has been the custom, and we think unfortunately so, to present the readers of many books on perspective with long arrays of mathematical definitions and theorems. And this, also, when the professed intention of the writer has been to put the subject in a simple and easily-understood manner.\* The student has been puzzled, when expecting direct explanations of principles, by definitions, postulates, and axioms taken from Euclid's elements. He has been required to commit these to memory, and to make himself familiar with triangles and quadrangles

\* The universality of this unfortunate fashion of treating a subject which may be explained clearly enough, is perhaps the result of a mistaken notion in the writer, concerning which Archbishop Whately makes the following remarks. He says: "Universally, indeed, an unpractised writer is liable to be misled by his own knowledge of his own meaning, into supposing those expressions clearly intelligible which are so to himself, but which may not be so to the reader, whose thoughts are not in the same train. And hence it is that some do not write or speak with so much perspicuity on a subject which has long been very

of all kinds. "Right-angled isosceles, acute and obtuse angled isosceles, right-angled scalenes, acute and obtuse angled scalene triangles, rhomboids, trapeziums, trapezoids, isosceles trapezoids," have been given to the student as food for intellectual digestion; but in nine cases out of ten he has been unable to digest them, simply because his mental stomach is not of the ostrich kind. He has not been accustomed to swallow the remains of glass bottles, scraps of mouldy leather, black heads of tobacco-pipes, tenpenny nails, or other such hard articles. And so the good intentions of the writer on perspective, who makes "simplicity of diction" his great aim, who "teaches perspective without the mention of its name," and "avoids all technicalities and hard words" (!) have been frustrated and defeated. He fails because he supposes the student to start from the same stand-point of perfect knowledge as he himself writes from. He forgets the difficulties with which he had to deal in learning per-

familiar to them, as on one which they understand indeed, but with which they are less intimately acquainted, and in which their knowledge has been more recently acquired. In the former case, it is a matter of some difficulty to keep in mind the necessity of carefully and copiously explaining principles which by long habit have come to assume in our minds the appearance of self-evident truths. So far is Blair's notion from being correct, that obscurity of style springs from indistinctness of conception."

spective, and involves whole multitudes of conditions in a sentence, which is perfectly intelligible to himself, because he is acquainted with the underlying principle that binds together or illuminates them,—conditions, however, which are entirely dark and cabalistic to the student, because the writer has failed to mention the “idea,” without which they are a mass of detail lacking both sense and connectedness. He multiplies particulars, and is great, as we have said, in mathematical definitions; talks learnedly and lengthily of the construction of the eye—its crystalline humour, its cornea, and its retina; of the refraction of rays when passing through unequal media; he is familiar with base lines, angles of vision, planes of delineation, points of sight, vanishing points, and a great many other points, all equally contributing to make his book by no means easily understood—a darkness visible. It therefore is no matter of surprise that a fair knowledge of perspective should be so rare. The student who can obtain such a knowledge from some books published on the subject, is equal to the task of going through Newton’s “Principia,” and may reasonably lay claim to be a discoverer, if not the first, of a system of perspective.

We are not in anywise depreciating here the value of mathematical studies. Nothing, indeed, can be



farther from our intention. But we think it right to protest against the useless and absurd system of giving a quantity of mathematical detail when treating of perspective, and this more especially when the principles which would explain this mass of detail, and render it intelligible, are not given directly, or are to be guessed at only by inference.

In laying down a few general initiative canons which govern correct perspective drawing, we shall study the utmost simplicity and brevity of treatment. And we hope, too, that the difficulties which commonly present themselves to young students, will be met with clear statements and unmistakable explanations. We shall carefully avoid the error, that the student may be assumed to possess any knowledge of the subject. For whilst we would not dwell at all upon what has the appearance of superfluous matter, it is at the same time necessary to explain first principles in a decided and sufficient fashion.

The first canon which the student should understand is, that "all objects, except spheres (*i.e.*, perfectly round balls), alter their appearance if their position be changed." If we take a sphere and hold it before the eye, square opposite, then look at it obliquely, whether above or below the line of sight, or to the right or left,



we see that its outline is not in any way altered by its change of position. Its circumference is still perfectly circular, and would be so whatever place it occupied. But if we take any other objects, say books, baskets, tables, or chairs, and alter their position with respect to the eye, we perceive immediately that they acquire a difference of apparent shape. The end of a book farthest from the eye now seems narrower than the nearer one; the basket may be made to show its outside or inside the more prominently as we please; if the table have two equal leaves, these may be so placed as to make the breadth of one appear much greater than the breadth of the other; and the legs of the chair become of various lengths and thicknesses. The student will perhaps have some difficulty in realising this. But let him take a book in his hand, and hold it in various positions, and after a few trials he will get a firm hold of the fact that "the object alters its appearance if its position be changed."

Let another example be taken. On a sheet of paper let a circle of, say about three inches diameter, be drawn (*see* fig. 16) very thickly. The sheet may then be laid upon a table. It must lie perfectly level, for if there be any creases or wavy parts in its surface, the

success of the experiment will be defeated. The student should now alter the position of his eye with respect to the figure, so that instead of seeing it square opposite, he may see it obliquely. He will observe, as he gradually brings his eye to a horizontal position on a level with the table, that the circle alters very materially. Instead of a circle he now sees an ellipse (*see* fig. 14), and this becomes narrower, until at last there is nothing but a mere black line in view. The change is unquestionable, and the student will be forced to admit that the "object has altered its appearance by change of position."

But the fact is as plain as the daylight. The student stands before a house, say so directly in front that its gable ends are invisible to him. He leaves the front and turns to the gables, so that the front is shut out in its turn. He next faces the corner of the house, and both front and gable come in sight. And, of course, the same results would ensue if, instead of the student changing his position with respect to the house, the latter were to change its position with respect to him. Or again: if two or three hundred men, or bodies of any kind, be placed in a row, it just depends upon the position from which our view of them is taken as to whether we see the right hand, the left hand, or the

middle object the largest ; or, in other words, as their position alters, so does their appearance.

The following subordinate principle springs from this fundamental canon : "Horizontal, oblique, and curved lines may run in apparently other directions than their real ones." A line may be joined to a vertical one, so as to form a right angle, and such line is therefore really horizontal ; but as we have before asserted, the angle may be so changed in position that it may be made to appear either acute or obtuse, that is, greater or less than a right angle ; thus—



Fig. 31.



Fig. 32.



Fig. 33.

Or again : let the student place himself at the end of a long wall, whose top is about the same height as his head. He is perfectly aware of the fact that the two lines which form the base and the top run parallel the whole of its length. It is five feet high from one end to the other ; and yet the student cannot but perceive that the wall appears to decrease in size as it increases in distance from him. It becomes small by degrees,

until at length it is lost in the far-away distance. Now, why is this? Why does the wall appear to diminish in size when we know that it is of the same height through every yard of its length? The horizontal line at the top of the wall, which is level with the student's head, still appears horizontal, and continues to its farthest extent on the same level. The reason of the seeming change of height is the apparent alteration in the direction of the line representing the base of the wall. Instead of running parallel with the horizontal line above, it apparently converges towards it like the two sides of a triangle.

But further. Let the student stand at the end of a long row of buildings, and set off upon the corner farthest from him an imaginary point representing the altitude of his head. Or, in other words, supposing the row of houses to be thirty feet high, the student must imagine a point about one-sixth of thirty feet, and set it off in his mind as if it were really marked upon that end of the row opposite to which he is standing. A straight line should then be supposed to exist, one extremity of which starts from the said imaginary point, the other extremity being in the student's eye. This line would be represented as horizontal in a perspective illustration (see fig. 34), if

the base of the buildings were level, *i.e.*, neither uphill nor downhill; and it is the standard by which the apparent change in the direction of the upper and lower lines of the row is to be tested. Now, if the student were to stand directly in front of the build-



Fig. 34.

ings, and at some distance from them, he would perceive that such a supposed line must run parallel with both base and roof. But in his position, at one end of the row, the upper and lower lines appear to tend in the direction of the horizontal line which he has imagined. The roof tends downwards, and the base tends upwards. Neither of them is parallel with the horizontal line aforesaid. And if the latter were produced far enough, the base and roof lines would, if likewise produced, meet upon it in a point common to both (see fig. 34). In this example the student will notice that the line of the roof is above, and that of the base is below, the imaginary sight-line. And he



will notice, too, that the point we are trying to make clear to him, is by this illustration proved past further doubt. For if the horizontal lines above his head appear to tend downwards, and those below his head appear to tend upwards, the conclusion is warrantable that "horizontal lines may run in apparently other directions than their real ones." There can, of course, be no horizontal lines but such as are above, below, or on a level with the student's eye.

With regard to oblique lines no special remarks need be made. It will be perceived that any change in their position will bring into operation the same laws which govern the apparent changes of horizontal lines.

Of circles we have already spoken. The fact that they become ellipses, by change of position, we have before illustrated; and the laws which govern them are applicable to all curved lines. The general principle is therefore proven, that "horizontal, oblique, and curved lines may run in apparently other directions than their real ones."

Now, with these facts before him, the student should be able to do something in the way of practical inference. If he can get a thorough hold of the ideas contained in the few preceding paragraphs, he will



find no great difficulty in explaining some of the most prominent facts connected with perspective representation. As, for example, he will understand why the leg of the wheelbarrow (fig. 4, Plate VIII.) here given, which is farthest from the spectator, appears higher than the nearer one. He will know then that  $a b$ , although appearing horizontal when seen square opposite, must here be represented by an oblique line, because the ground is lower than the line of sight, and  $a b$  consequently tends upwards. Or again: he will understand the reason why a pump-trough appears broader than the pump, although its breadth is really the same. For, as has been already stated, increase of distance is the cause of apparent decrease of size; and as the trough is nearer the spectator than the pump, it is consequently drawn the larger of the two in breadth.

We have already stated that it is our intention to say but little in the present work upon the subject of perspective. We believe that a knowledge of perspective never yet did much towards making a great free-hand draughtsman. It is necessary for an architectural draughtsman to go somewhat deeply into the subject, as he is frequently required to put elevations of buildings into strictly correct perspective, and any

deviation from mathematical precision in such a drawing is so much abstracted from its excellence. But, as has been observed,—we believe by Mr Ruskin,—no amount of perspective knowledge will teach one how to draw the curve in a river's bend. We cannot determine by any number of vanishing points, or points of distance, the height or breadth of the piled-up cumulus clouds following each other upon a summer's day in playful troops over the clear deep blue of heaven. We cannot apply our rulers, compasses, and angleometers to the strong yet delicate lines of the hill, as they fade away into smoking vapour on a day when the sky is angry, or into the fairy purple distance when the twilight is coming down and all nature seems resting from the toil of beating back the rays of a July sun. Nature will not be measured. She refuses to unfold her beauties to a mere land-surveyor, and no amount of practice with a theodolite will make such an one a Mallord Turner or a Claude Lorraine. And we very much question whether the great landscape painters, or the great painters in any department of the present day, know any more of perspective than its simplest elementary principles. When Turner was professor of perspective to the Royal Academy, he was about as

utterly ignorant of the mathematical definitions and theorems which usually constitute, or at least accompany, the "system," as any man could be. And the instance is, we believe, not a solitary one by any means.

It will be evident to the student that, if lines could be seen as they actually are, if one were able to determine their exact amount of deflection from certain standards, and to transfer them to paper with indubitable certainty, a system of perspective would be useless in free-hand drawing. For all the aid that a knowledge of perspective will legitimately give the free-hand draughtsman is limited to its application, as a test by which he can determine the accuracy or otherwise of his work. It is at best but a crutch, and is mainly useful as a support to the lame and the weak. Certain of its principles may help the young student, who is just commencing to learn the elements of drawing; and it is only the consideration of this fact which has induced us to treat of the subject here at all.

We have spoken incidentally of vanishing points and points of distance,—points, both of them, which have frequently caused students to vanish to such a distance from the subject, that they have never found courage to return to it. A cursory explanation of the

former will conclude what we have to say in the present place on perspective drawing.

In fig. 34 we have given a view of a row of buildings, and in our notice of that view we stated that, if the base and roof lines were continued past the end of the building, they would meet in a point on the imaginary horizontal line the height of the student's eye. Let the student understand this clearly. It was stated that the base and roof lines were changed from really horizontal to apparently oblique lines by the position of the spectator; that the former tended upwards and the latter downwards,—or, in other words, they tended towards each other, viewed from the nearer end of the row; that if we were to produce them both, they would, of course, meet in a certain point; and that this point, called a vanishing point, is situated somewhere on the imaginary horizontal line\* level with the student's eye.

\* This horizontal line is thus obtained. The spectator of an ocean scene, if he view it from the deck of a ship, sees but a comparatively small distance. The line of demarcation between sea and sky, or, as it is called, the line of the horizon, is perhaps ten miles off, to speak in popular language. If he ascend the main-mast, however, he will gradually see a greater distance as he rises. *But whatever position he takes, the line of the horizon is always supposed to be the same height as his head.* The student will, of course, see that, to obtain the horizontal line, he must imagine a line drawn between his eye and the horizon.

In sketching, the student will find it a useful plan, when obtaining the vanishing point for such a row of buildings as fig. 34, to hold his pencil close before his eye, and making it coincide with the direction of the converging lines, to mark the point at which they meet. The horizontal line will, of course, aid him in obtaining the vanishing point, and may serve as a text to prove the accuracy of his calculation.

These few statements in relation to the subject of perspective will no doubt have some influence in simplifying the difficulties attending the student's first attempts at object-drawing and sketching from nature. We would advise him to read over the remarks upon perspective two or three times, and if he rightly apprehend them, they will furnish him with initiative ideas, which will open to him as much of the "system" as he will find necessary in his practice of free-hand drawing. In the meantime he may employ himself profitably with trying the true direction of the lines in a door, a window, or a room, and with attempting to represent the changes of horizontal lines in various positions. It is likewise a desirable plan to procure a circle made of wood or iron, and to draw it as seen at various degrees of obliqueness from the eye.

As we have intimated, almost any object will serve



the student's purpose. The pump, fig. 55, is an excellent example of a simple study. It will be perceived that the lines are mostly drawn in a broken, uneven fashion; but it should be observed in relation to them, that they need no careful treatment, as a line drawn with geometrical precision. We remember seeing a couple of Prout's sketches some time since, in which this "broken straight line" was used with most remarkable effect. The subjects were a couple of old stone pulpits, one of them fantastically crowned with ivy, and the appearance of age, the crumbling of the stone, and the wide mortarless rifts, were capitally given by means of the broken line. Indeed, this line has power, freedom, variety, and fancy, to which the one that lies evenly between its extreme points has no pretensions.

Subjects are to be found in the house in abundance. An egg and egg-cup (Plate VIII., fig. 2), will be within his reach, and they also will afford excellent practice. In representing them, a vertical line should be struck through as a centre, for the accurate drawing of the curves, which line should be carefully referred to as a standard for testing the correctness of the drawing during its progress. The student will likewise observe, in this example, the effect of the law respecting the changes of appearance in circles. The base of the



egg-cup is really circular ; it is represented by an ellipse.

In the wheelbarrow (fig. 4, Plate VIII.) the same principle is to be seen active. The wheel is circular, but it is drawn as an ellipse. In object-drawing and sketching generally, the student should acquire a bold, direct style of work, exhibiting clearness of purpose, and certainty as to the effect of the means employed. A little attention to grouping and arrangement will frequently turn an ugly subject into a beautiful one.

The student may thus draw every fit object about the house or garden before he proceeds to try sketching in its widest sense. A door in various positions forms a first-rate study ; and whilst the student can borrow a three-legged stool, a long brush, or a coal-scuttle, he ought never to want for a subject. Incessant practice with the pencil, and a thorough acquaintance with the forms of objects, will produce their natural fruits—artistic capacity and feeling.

The student may now commence sketching buildings, or simple out-of-door subjects ; and he need not be very particular in the choice of his subjects, providing they are not too complicated, and do not call for a greater amount of labour than with his present acquired powers he can well get through. Fig. 1, Plate VIII., is

simple, and such studies are easily managed. They are to be found in any number all over the country, and may be worked up into charming sketches. In the copying of a rustic stile, similar to the present example, the main proportions of the landscape should be first determined by dots or small sketchy lines. When these are found by comparison to be correct, the deeper shadows may be dashed in broadly, and an attempt made to get the general effect of the landscape as quickly as possible. The detail will, of course, be afterwards added. The same remark applies to almost all kinds of drawing. The general proportions should be first determined, the darker shadows put in immediately afterwards, and the whole finally worked up to the required degree of finish.

Fig. 1, Plate VII., is a sketch of a rustic bridge amongst the Yorkshire hills. Such studies may at times be made exceedingly picturesque. The rough, disjointed stonework, with wide uneven rifts here and there, displaying the shakiness and general weakness of the structure, the deep shadows under the arch throwing down upon the playful, gurgling stream underneath its own dark image, whilst in the midst of the shaded water a thin gleam of light shoots a thread of silver right through the darkness, like a smile upon the tearful

face of a child. The stones interrupt the flowing of the water, which, however, rushes past them, its small specs of foam glistening and dancing in the sunlight. Long blades of grass, or tall thin rushes, are to be seen bending, like Narcissus, towards their own reflections, whilst the water moves past them, or winds itself between them, ever singing its glad song, full of sweetest music. We dare say the student will have fancied it to be a disadvantage, under which landscape and other painters labour, that in trying to produce in the mind the same effect as any scene represented would have done, they must always leave out the sounds accompanying it. They cannot make their birds sing, nor their streams gurgle; their bees will not hum, nor their horses neigh. But the painter labours here under no greater disadvantage than the orator or the novelist. In all these cases the aim is to raise certain feelings by the use of means which are accounted legitimate in each department, and any attempt to introduce other means than these is to be condemned. But we are slightly digressing, and as our space is now become extremely limited, we must leave the student to pursue the analogy himself. He will find much useful practice in subjects like fig. 2, Plate VII.

Animals may be introduced in landscapes as acces-

sories to the general effect, or may be made the principal subjects of sketches. The latter way of treatment is adopted with figs. 1 and 2, Plate VI. The cow is slow in its turn of mind, and gives an artist a better chance of taking an uninterrupted sketch than most other animals.

If the student live near the sea-side, he will find there abundance of picturesque materials for study and for copying. The anchor, fig. 4, Plate VII., contains some firm yet free handling, and from its mixture of curved and straight lines is agreeable as a subject.

The boat, fig. 3, Plate VIII., the last example given here, is another instance of a carefully-drawn sea-side sketch. And similar subjects are innumerable.

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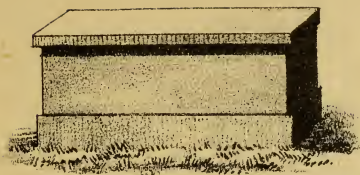
For the present our labour is concluded. We have attempted in the present work to give an account of the elementary principles of free-hand drawing. We have written of lines and shading, of object-drawing and perspective, in as plain a style as was found possible; and notwithstanding the limits of the work, we believe that the various subjects have been treated in a fuller and more sufficient fashion than in much larger

and more pretentious works. The illustrations have all been drawn by ourselves, either from sketches of our own, or from carefully selected examples by other draughtsmen, in the hope that they may prove extensively useful to beginners.

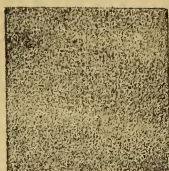




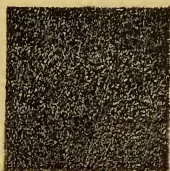




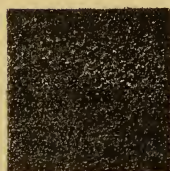
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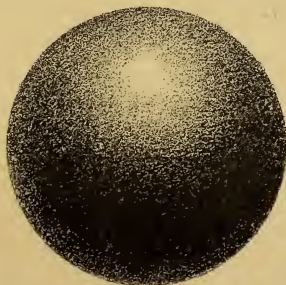
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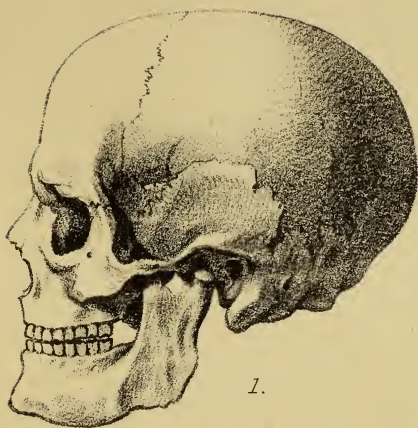


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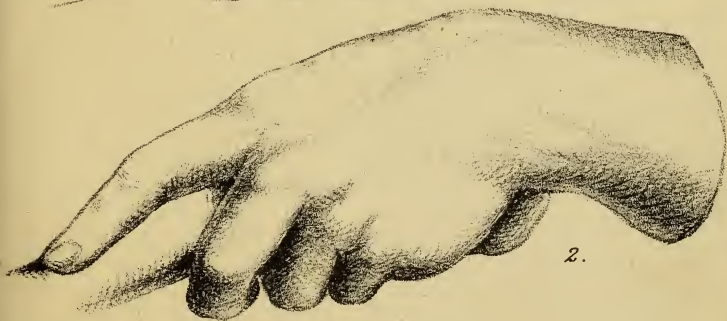


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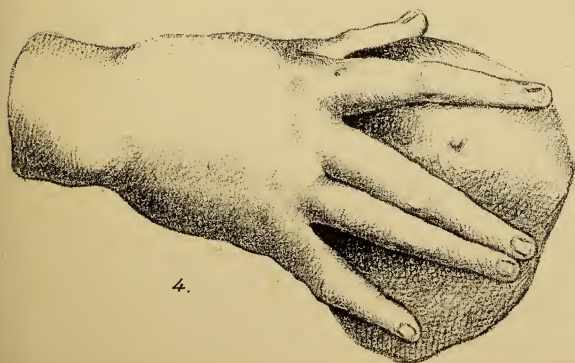
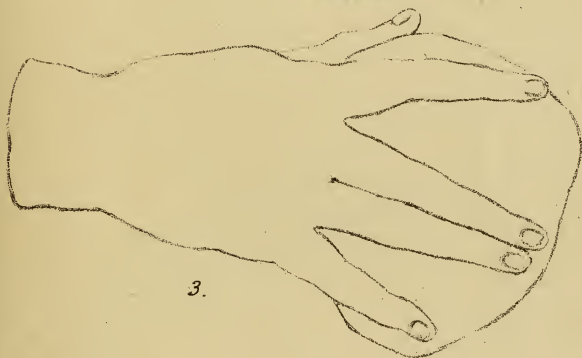
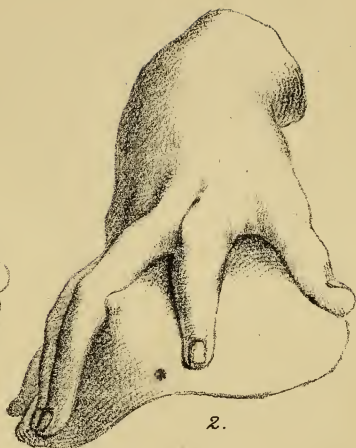
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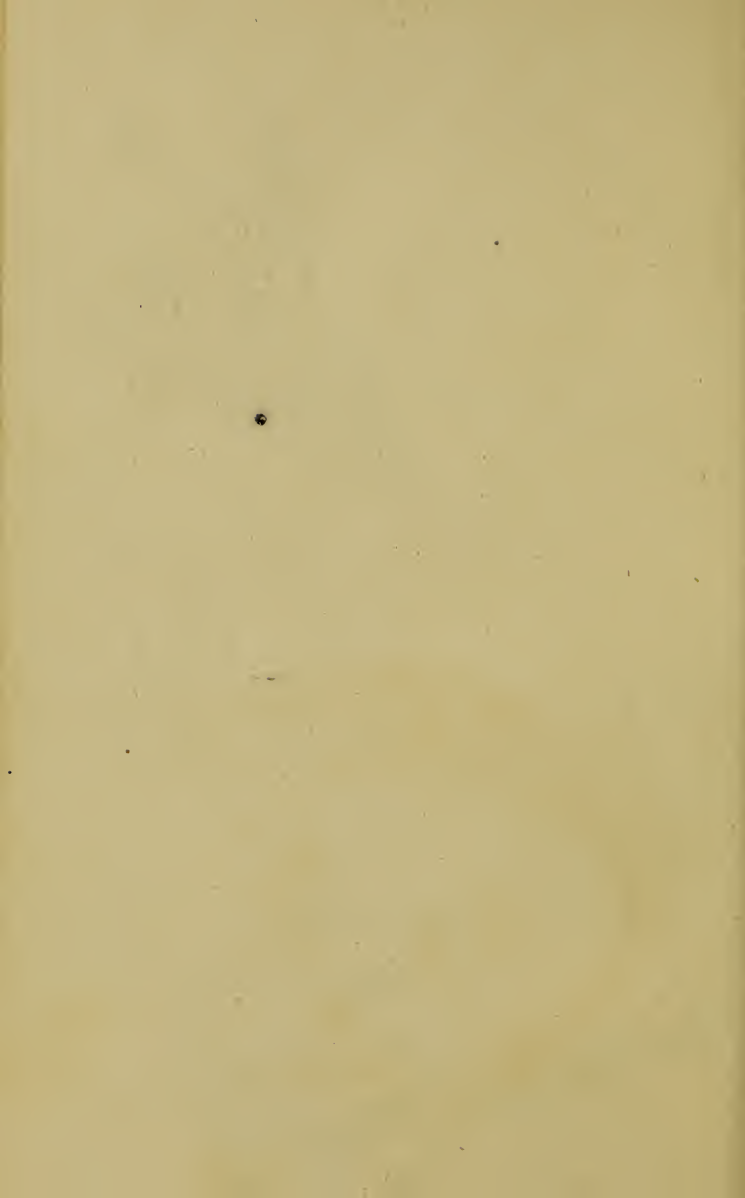








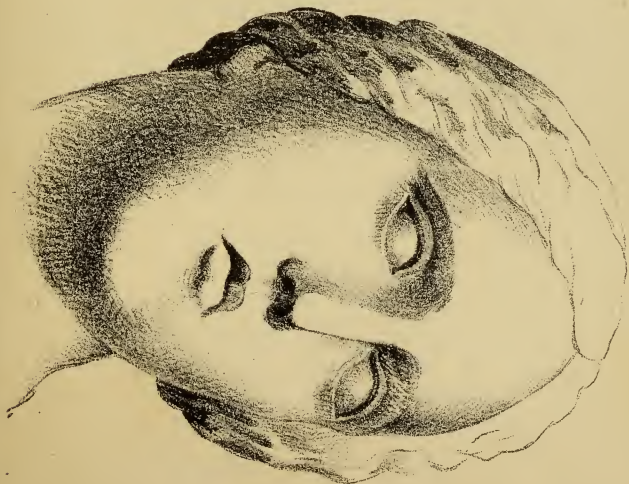




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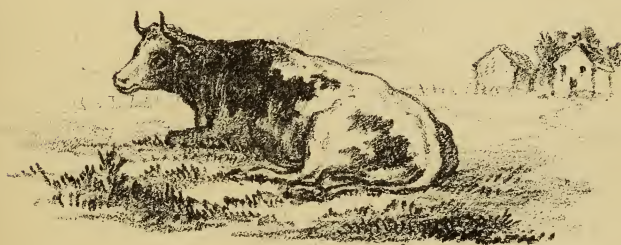
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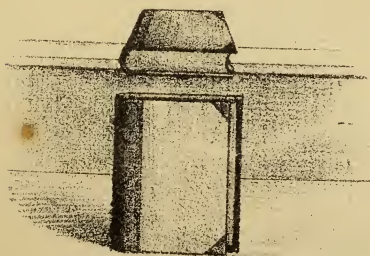




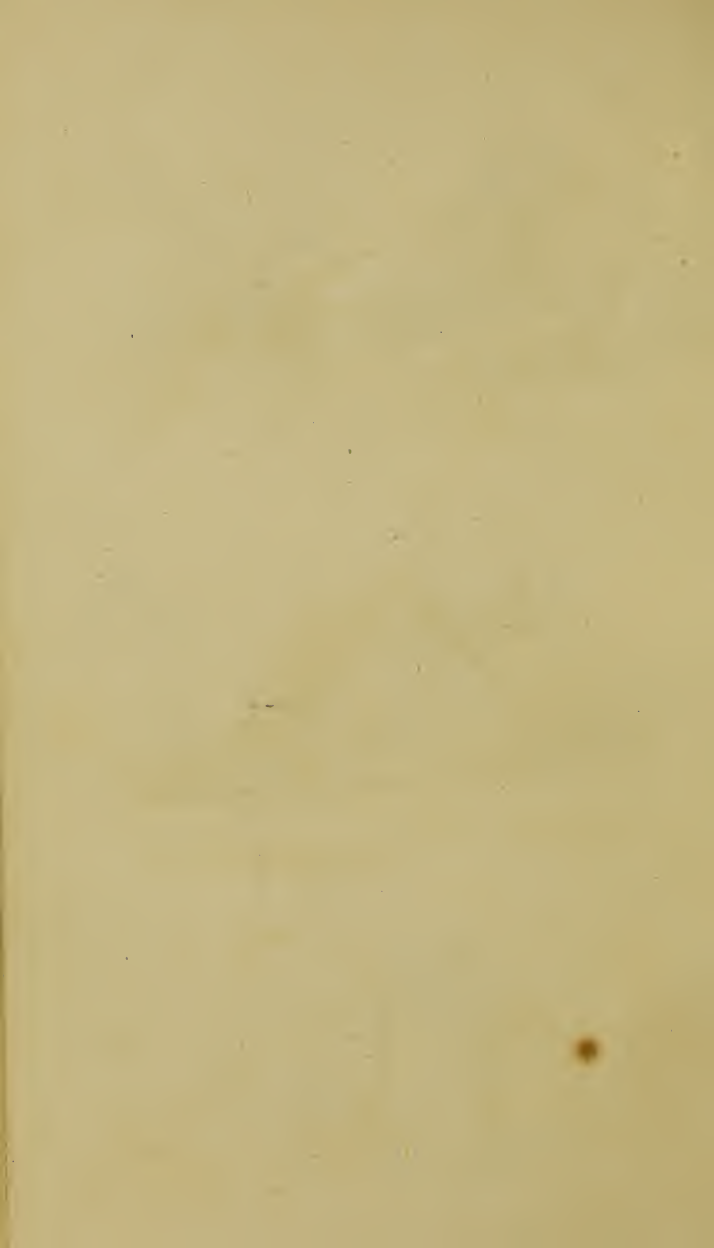
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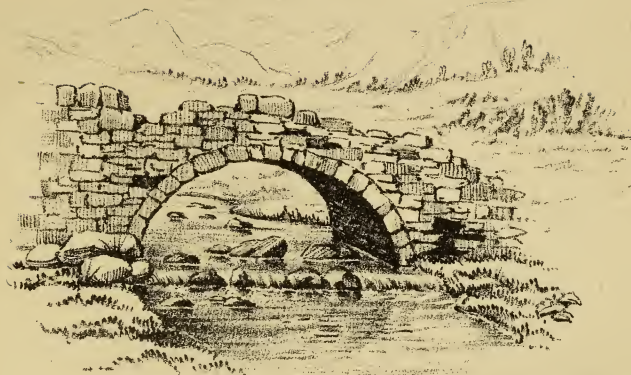
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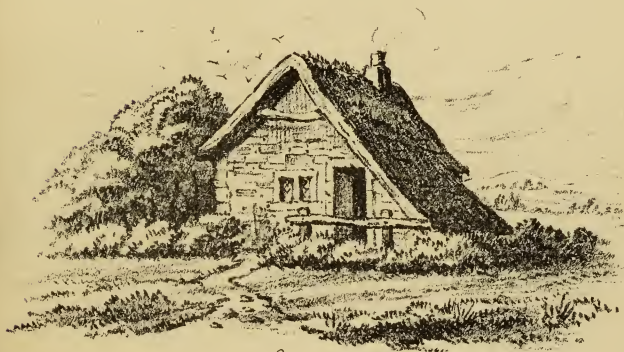
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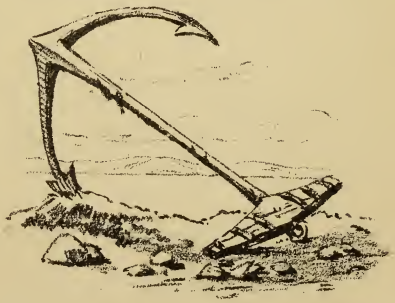
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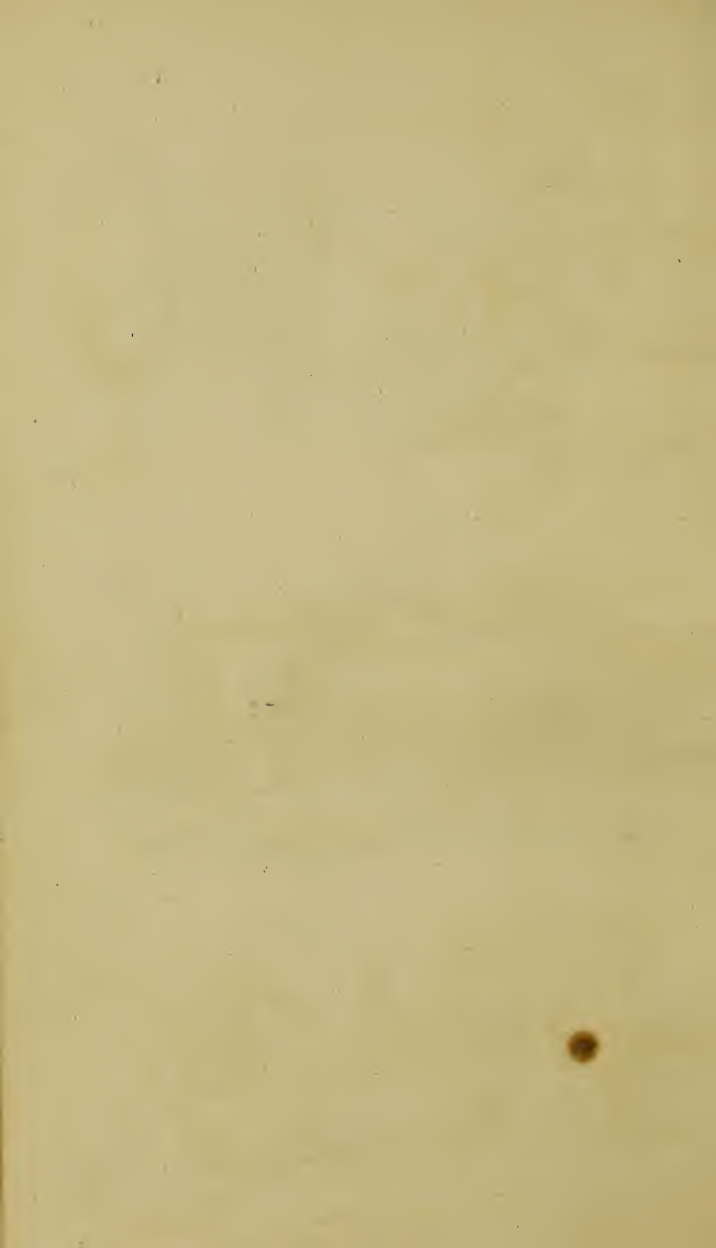
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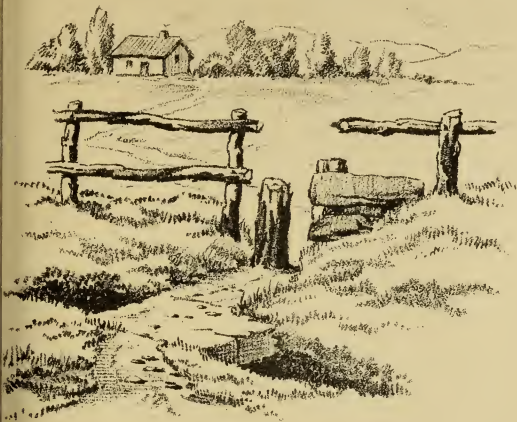


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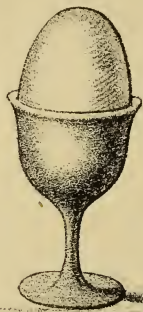


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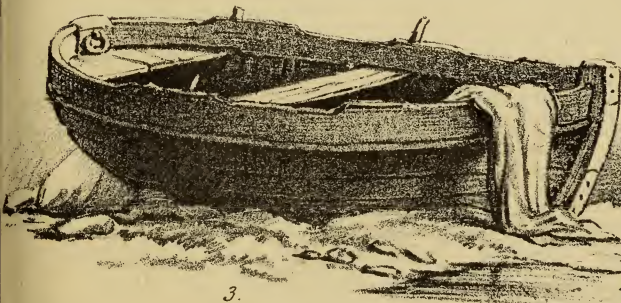




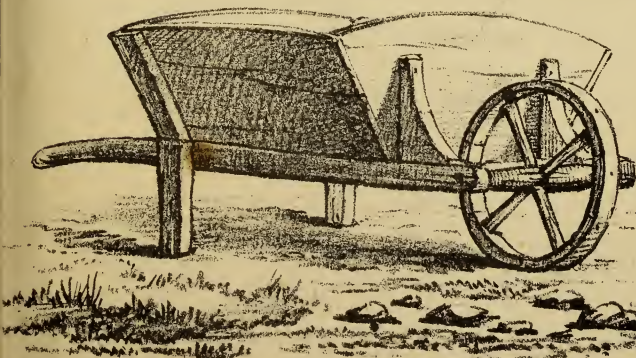
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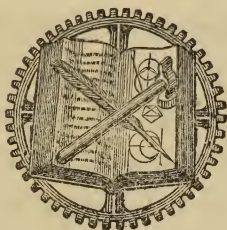
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